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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,173	09/29/2003	Kalman Pelhos	I69.12-0556	1945

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KINNEY & LANGE, P.A.
THE KINNEY & LANGE BUILDING
312 SOUTH THIRD STREET
MINNEAPOLIS, MN 55415-1002

EXAMINER

RICKMAN, HOLLY C

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,173

Applicant(s)

PELHOS ET AL.

Examiner

Holly Rickman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 32-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 13-15, 18, 20, 21, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 8-12, 16, 17, 22-24 and 27-31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/5/04&9/29/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. It is noted that two co-pending applications are referenced on pages 1 and 20 of the specification. The serial numbers of these applications need to be added to the specification.

Election/Restrictions

2. Applicant's election of Group I (claims 1-31) in the reply filed on 9/23/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4-5, 14-15, 18, 20-21 and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Thoma et al. (US 5569523).

Thoma et al. disclose a magnetic recording medium having a seedlayer and magnetic layer disposed on a substrate wherein the magnetic layer has a c-axis and easy axis tilted at an angle with respect to an axis perpendicular to the substrate. The reference teaches the c-axis is

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also the easy axis direction for cobalt (see col. 10, Table 3, Sample 1-5 wherein θ_1 and θ_2 are 63° , i.e.9, about 60° ; col. 15, lines 1-21).

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Thoma et al. (US 5569523).

Thoma et al. teach all of the limitations of the claims as detailed above, except for the claimed coercivity value. It is the Examiner's contention that the medium taught by Thoma et al. inherently satisfies this claim limitation by virtue of the fact that the reference teaches a magnetic recording layer formed from a Co alloy having the claimed tilting of the c-axis and easy axis.

It has been held that where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the burden of proof is shifted to applicant to show that prior art products do not necessarily or inherently possess characteristics of claimed products where the rejection is based on inherency under 35 USC §102 or on prima facie obviousness under 35 USC §103, jointly or alternatively. *In re Best, Bolton, and Shaw*, 195 USPQ 430. (CCPA 1977).

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7. Claims 1, 3-4 and 13-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hagemeyer et al. (Thin Solid Films, Vol. 230, No. 2, 1993, pp. 199-202) as evidenced by Thoma et al. (US 5569523).

Hagemeyer et al. disclose a magnetic recording medium having a Ti underlayer and a CoCr films epitaxially grown thereon such that the c axis of the CoCr crystal grain layer is at an angle with respect to a line normal to the substrate. The reference teaches that the c-axis angle is 35° (see abstract; Table 1, first data line; second paragraph of the Experimental details section on p. 200). The reference does not explicitly disclose the angle of the easy axis of the magnetic layer.

Thoma et al. teaches the c-axis is also the easy axis direction for a cobalt alloy (see col. 15, lines 12-15).

It is the Examiner's contention that the c-axis and easy axis of the recording medium shown in Table I are inherently equal (i.e., 35° - see first example in Table I). It has been held that where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the burden of proof is shifted to applicant to show that prior art products do not necessarily or inherently possess characteristics of claimed products where the rejection is based on inherency under 35 USC §102 or on prima facie obviousness under 35 USC §103, jointly or alternatively. *In re Best, Bolton, and Shaw*, 195 USPQ 430. (CCPA 1977).

8. Claims 1-2, 5-7, 13-14, 18, 20 and 25-26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tanahashi et al. (J.

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Magn and Mag. Matl., Vol. 153, No. 3, 1996, pp. 265-272) as evidenced by Thoma et al. (US 5569523).

Tanahashi et al. disclose a magnetic recording medium having a Cr underlayer and a CoCr film epitaxially grown thereon such that the easy axis of the CoCr crystal grain layer is at an angle with respect to a line normal to the substrate. The reference teaches that the crystalline structure of the underlayer and Co layer is tilted at an angle with respect to a line normal to the surface of the substrate (see abstract; Experimental procedures and Results sections on pp. 266-267; Figure 8 and 10 and Conclusions section for teaching of H_c). The reference does not explicitly disclose the angle of the c-axis of the magnetic layer.

Thoma et al. teaches the c-axis is also the easy axis direction for a cobalt alloy(see col. 15, lines 12-15).

Thus, it is the Examiner's contention that the c-axis and easy axis of the recording medium disclosed by Tanahashi et al. are inherently equal. It has been held that where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the burden of proof is shifted to applicant to show that prior art products do not necessarily or inherently possess characteristics of claimed products where the rejection is based on inherency under 35 USC §102 or on prima facie obviousness under 35 USC §103, jointly or alternatively. *In re Best, Bolton, and Shaw*, 195 USPQ 430. (CCPA 1977).

Allowable Subject Matter

9. Claims 8-12, 16-17, 19, 22-24, and 27-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Rickman whose telephone number is (571) 272-1514. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Holly Rickman
Primary Examiner
Art Unit 1773

December 9, 2004